

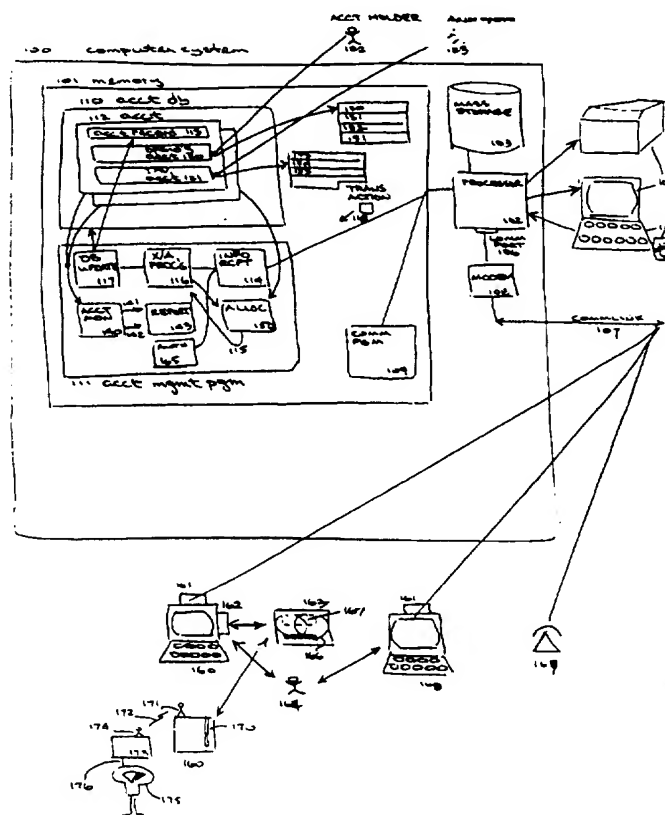
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**(54) Title:** IMPROVED INVESTMENT AND ACCOUNT MANAGEMENT SYSTEM

**(57) Abstract**

A method and computer system manages an investment and spending account, so as to achieve selected guidelines for investment returns and spending flexibility. A computer system (100), having a memory (101) for recording account information (110) and a processor (102) for processing account data and transactions associated with the account, implements a combined investment and spending account, by which an account holder achieves a selected investment return and a selected degree of spending flexibility. The computer system monitors inflows to and outflows from the account, and investment returns achieved for the account, and indicates when adjustments to the account are required to achieve the selected investment guidelines while presenting the account holder with the selected spending flexibility.



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1 This application is submitted in the name of inventor  
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4 90067.

5  
6 S P E C I F I C A T I O N  
7

8 **Title of the Invention**  
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10 Improved Investment and Account Management System  
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12 **Background of the Invention**  
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14 **1. Field of the Invention**  
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16 This invention relates to a computer system implement-  
17 ing an improved investment and account management system.  
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## Summary of the Invention

The invention provides a method and computer system for managing an investment and spending account, so as to achieve selected guidelines for investment returns and spending flexibility. A computer system, having a memory for recording account information and a processor for processing account data and transactions associated with the account, implements a combined investment and spending account, by which an account holder achieves a selected investment return and a selected degree of spending flexibility. The computer system monitors inflows to and outflows from the account, and investment returns achieved for the account, and indicates when adjustments to the account are required to achieve the selected investment guidelines while presenting the account holder with the selected spending flexibility.

[ NOTE: ... This is described as an "investment and spending account" because those are the two activities associated with the account. We will broadly claim the concept of this dual account, even though embodiments may only have "investment" to the extent that a bank guarantees a fixed return at the end of a fixed maturity, i.e., there is no investment controlled by the account holder or managed for his or her sake. ]

In a preferred embodiment, the computer system associates a spending account with a related investment account (for

1 example, the related investment account may comprise: an annuity  
2 personalized to the account holder, a share in an investment mu-  
3 tual fund, or an obligation by an investment entity such as an  
4 insurance company), so that the account holder may access the  
5 spending account within the spending flexibility guidelines,  
6 while an account manager controls the associated investment ac-  
7 count within the investment guidelines. The computer system  
8 monitors the resources available in the spending account and the  
9 investment account, and responsive thereto, presents the account  
10 manager with signals indicating whether investment adjustments  
11 are suggested for meeting the investment guidelines and while  
12 still permitting the spending flexibility guidelines, and/or pre-  
13 sents the account holder with signals indicating whether monetary  
14 inflows are needed or outflows are permitted within the spending  
15 flexibility guidelines and while still meeting the investment  
16 guidelines.

17  
18 [ NOTE: ... The computer system is described as giving  
19 alternative investment and spending signals, such as: (spending)  
20 "increase your inflows", "decrease your outflows", or  
21 (investment) "increase your stock/bond ratio", even though in the  
22 "Beyond Card" embodiment the investment signals would have no  
23 meaning to the account holder and might be ignored by the bank  
24 obligor. ]

25  
26 In a preferred embodiment, the investment guidelines  
27 are selected from a group comprising known cash returns, known  
28 maturity dates, known percent returns, and combinations thereof.  
29 The spending flexibility guidelines are selected from a group

1 comprising known cash loan buffers, known interest rates, known  
2 payment rates, known percent of account size loan buffers, and  
3 combinations thereof.

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5 For example, the account holder may select an account  
6 having the following investment guidelines: an initial account  
7 size of \$10,000, a known percent return of 50% of the initial ac-  
8 count size, and a known maturity date of 20 years from account  
9 initiation, and the following spending flexibility guidelines: an  
10 overdraft buffer of 25% of the initial account size, an payment  
11 interest rate of 4% over the prime rate, and rolling credit pay-  
12 ments within 30 days of any account negative balance.

13  
14 In this example, while the account is active, the ac-  
15 count holder may make deposits to and withdrawals from the ac-  
16 count just like another type of account, such as: a checking or  
17 savings account, a credit card or debit card account, or another  
18 type of account. Periodically, such as each month, the computer  
19 system examines the transactions associated with the account and  
20 determines if the status of the account permits the investment  
21 guidelines to be met. For example, if the account holder has  
22 drawn down the account balance, it may occur that the investment  
23 guidelines cannot be met without a monetary inflow. In this  
24 case, the computer system may indicate to the account holder that  
25 a monetary inflow is required, such as by appending a charge to  
26 an account statement for that month. Similarly, if the account  
27 holder has increased the account balance, the computer system may  
28 indicate to the account holder that additional funds are avail-

1 able for spending, such as by increasing a spending limit or  
2 credit limit.

3  
4 [ NOTE: ... The computer system might also be broadly  
5 described as being tied more closely to a credit card model, such  
6 as arranging: automatic payments to payees, or rebates for fre-  
7 quent purchases, etc., even though in the "Beyond Card" embodi-  
8 ment this might not be implemented in full. ]

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10 [ NOTE: ... The computer system might also be broadly  
11 described as being tied more closely to an insurance or invest-  
12 ment model, such as arranging: automatic payments into mutual  
13 funds or bond purchase, automatic payments into insurance con-  
14 tracts, etc., again, even though in the "Beyond Card" embodiment  
15 this might not be implemented in full. ]

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## Claims

### *I claim:*

1. A computer system for managing and tracking an investment and spending account, comprising

a memory comprising account information, said account information being associated with an account;

a processor coupled to said memory, said processor being disposed to process said account information and to process at least one transaction associated with said account;

said memory comprising a set of investment guidelines associated with said account and a set of spending flexibility guidelines associated with said account;

means for directing said processor to determine, responsive to said account information, a first condition for raising a first signal associated with said investment guidelines;

means for directing said processor to determine, responsive to said account information, a second condition for raising a second signal associated with said spending flexibility guidelines; and

means for directing said processor to raise said first signal or said signal, responsive to said account information and said at least one transaction.

2. A system as in claim 1, comprising  
means for communicating with an account holder; and  
means for communicating with an account manager.



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2           3.    A system as in claim 1, comprising means for di-  
3    recting said processor to indicate suggested adjustments to said  
4    account, responsive to said first signal or said second signal.  
5

6           4.    A system as in claim 3, wherein said suggested ad-  
7    justments to said account comprise account statements to an ac-  
8    count holder associated with said account.  
9

10          5.    A system as in claim 3, wherein said suggested ad-  
11    justments to said account comprise investment statements to an  
12    account manager associated with said account.  
13

14          6.    A system as in claim 1, comprising  
15                means for monitoring expected inflows and expected out-  
16    flows associated with said account;  
17                means for altering said account information responsive  
18    to said expected inflows and expected outflows, whereby said  
19    first signal or said second signal are raised responsive to  
20    changes in said expected inflows and expected outflows.  
21

22          7.    A system as in claim 1, wherein said means for di-  
23    recting said processor to determine, responsive to said account  
24    information, a first condition for raising a first signal associ-  
25    ated with said investment guidelines, comprises  
26

27                means for directing said processor to determine an ex-  
28    pected investment return, responsive to said investment guide-  
29    lines;

1 means for directing said processor to compare said ex-  
2 pected investment return with said investment guidelines; and

3 means for directing said processor to define said first  
4 condition responsive to a result of a comparison performed by  
5 said processor responsive to said means for directing said proc-  
6 essor to compare said expected investment return with said in-  
7 vestment guidelines.

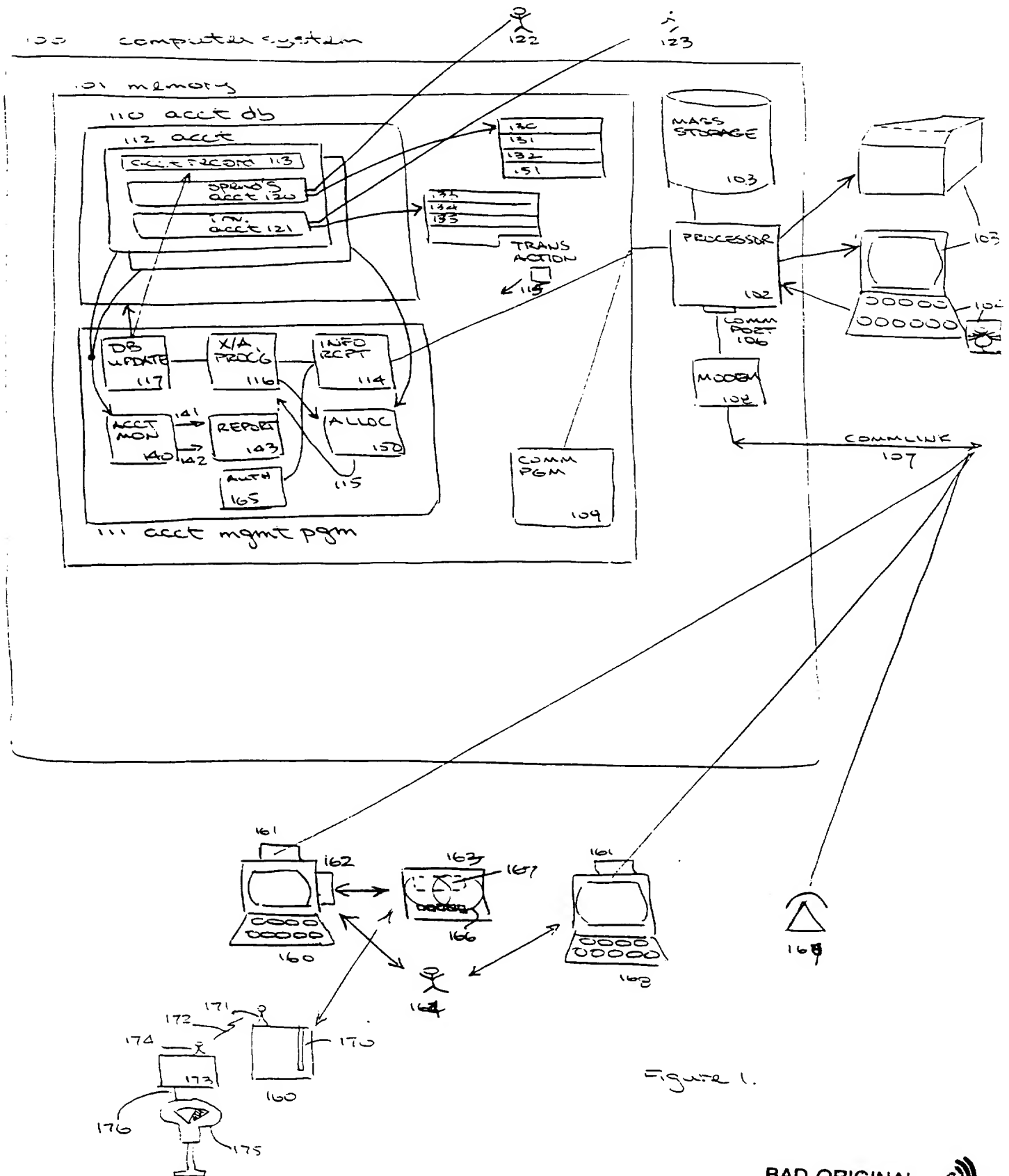
8  
9 8. A system as in claim 1, wherein said means for di-  
10 recting said processor to determine, responsive to said account  
11 information, a second condition for raising a second signal asso-  
12 ciated with said spending flexibility guidelines, comprises

13 means for directing said processor to determine an ex-  
14 pected investment return, responsive to said investment guide-  
15 lines;

16 means for directing said processor to compare said ex-  
17 pected investment return with said investment guidelines; and

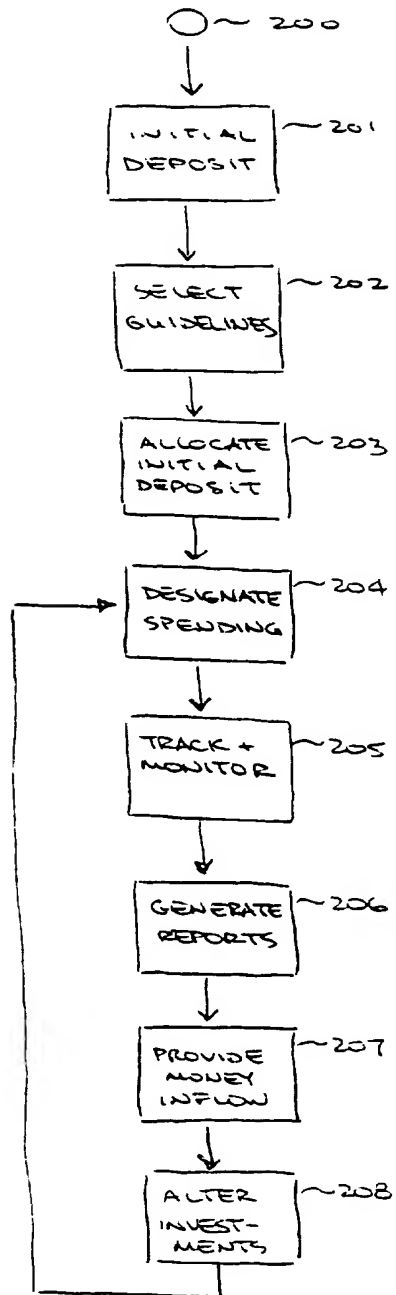
18 means for directing said processor to define said sec-  
19 ond condition responsive to a result of a comparison performed by  
20 said processor responsive to said means for directing said proc-  
21 essor to compare said expected investment return with said in-  
22 vestment guidelines.

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BAD ORIGINAL

Figure 2.



BAD ORIGINAL



## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US95/17068

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(6) : G06F 17/60; G06G 7/52

US CL : 364/408, 406

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 364/408, 406, 401R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS, DIALOG

search terms: investment#, spending, guidelines, account holder, account manager

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|-----------|---|-----------------------|
| A         | US, A, 4,346,442 (Musmanno) 24 AUGUST 1982<br>see Abstract  | 1-8                   |
| A         | US, A, 4,885,685 (Wolfberg et al.) 5 DECEMBER 1989<br>see Abstract  | 1-8                   |
| A         | US, A, 4,994,964 (Wolfberg et al.) 19 FEBRUARY 1991<br>see Abstract, col. 1   | 1-8                   |
| A         | DIALOG SOFTWARE ABSTRACT: File 237, Acc# 00015505;<br>MONEYCOUNTS; version 7.0; Parsons Technologies Inc.;<br>Date Released: 1992 | 1-8                   |
| A         | US, A, 5,210,687 (Wolfberg et al.) 11 MAY 1993<br>see Abstract; col. 1  | 1-8                   |

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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Date of the actual completion of the international search

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# INTERNATIONAL SEARCH REPORT

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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|-----------|--|-----------------------|
| X         | US, A, 5,214,579 (Wolfberg et al.) 25 MAY 1993<br>see Abstract; cols. 1-31         | 1-8                   |